

Notice of Allowability

Application No.

09/317,409

Applicant(s)

LUCAS ET AL.

Examiner

Art Unit

Jenna-Leigh Befumo

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on July 16, 2007.
2. ☒ The allowed claim(s) is/are 55,57-59 and 88.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Neller on September 25, 2007.

The application has been amended as follows:

Please Cancel Claims 1 – 12, 39 – 46, 60 – 76, 87, and 89.

In Claim 55, line 15, after "where", replace "an" with --the--.

In the specification, page 1, before the heading "Background of Invention", enter the following paragraph:

The following application is a continuation-in-part of U.S. Application,
09/084,031, filed on May 22, 1998, now abandoned.

2. The following is an examiner's statement of reasons for allowance:

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 16, 2007 has been entered.

4. The Amendment submitted on July 16, 2007, has been entered. Claims 13 – 38, 47 – 54, 56, and 77 – 86 have been cancelled. Claims 55, 88, and 89 have been amended.

5. The cancellation of claim 89, set forth above, renders moot the rejection of that claim set forth in the previous Office Action.

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6. The 35 USC 103 rejection to claims 55, 57 – 59, and 88 over Kain, Jr. (6,180,206) is withdrawn. With regards to claim 55 and 57 – 59 Kain, Jr. fails to teach a honeycomb structure consisting of a honeycomb structure and a plurality of uncured stiffness treated prepreg plies. Kain, Jr. fails to teach that all the prepreg plies include a plurality of fibers with a coating of both a polymerized precursor of polymeric material and a curable resin system applied to the plurality of fibers. Instead, Kain, Jr. teaches using multiple prepreg plies with a single, partially cured polymer coating and that a curable resin layer can be placed onto to one of those layers. The curable resin is not applied to all the prepreg layers. With regards to claim 88, Kain, Jr. fails to teach a fabric layer which consists of a plurality of fibers and a polymerized precursor of polymeric material. While Kain, Jr. discloses that prepreg layers can be used in the lay-up, the prepreg layers are partially polymerized. Hence, the prepreg layers used by Kain, Jr. include both polymerized polymer material and unpolymerized polymer material. Since the unpolymerized polymer material is excluded from the stiffness-treated layer by the “consisting of” language, none of the prepreg layers taught by Kain, Jr. can be used as the applicant’s claimed stiffness treated layer. Therefore, the rejections are withdrawn.

7. The prior art fails to teach or suggest a prepreg of a honeycomb sandwich structure consisting of a honeycomb core and a plurality of uncured stiffness treated prepreg plies, wherein the uncured stiffness treated prepreg plies include a plurality of fibers with a coating of both a polymerized precursor of polymeric material and a curable resin system applied to the plurality of fibers. The prior art does not teach that all the prepreg layers include both a coating of a polymerized precursor of polymeric material and a curable resin system applied to the plurality of fibers. Thus, claims 55 and 57 – 59 are allowed.

8. The prior art fails to teach or suggest a prepreg of a honeycomb sandwich structure comprising a honeycomb core, a stiffness treated fabric consisting of a plurality of fibers and a polymerized precursor of polymeric material and a curable resin, and a second prepreg ply between the honeycomb core and the stiffness treated prepreg ply. The prior art only teaches or suggests that the prepreg of the honey

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sandwich structure includes partially cured prepregs and does not teach using plies consisting of a plurality of fibers having a coating of polymeric material which has been polymerized. Thus, claim 88 is allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jlb
September 25, 2007

/Jenna-Leigh Befumo/
Primary Examiner

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